

## IN THE CLAIMS

The following is a complete listing of claims. This listing replaces all prior versions and listings of claims.

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Claim 1 (currently amended): A printing system ~~comprising for printing a~~  
~~print job and having a client computer and a server computer, connected to a network and each~~  
~~having storage means respectively for storing a client service item file and a server service item~~  
~~file, each of which comprises a set of user selectable service items, each service item comprising~~  
~~a set of printing attributes; said printing system comprising:~~

*an* ~~storage means in a client computer for storing a client service item file~~  
~~which comprises a set of user selectable service items, each service item comprising a set of~~  
~~printing attributes; wherein said client service item file is updated in accordance to~~  
~~communication with an external apparatus;~~

~~a client computer user interface by means of which a user can select a~~  
~~particular one of said service items having a particular set of printing attributes;~~

~~a comparison unit adapted to compare a time stamp associated with the~~  
~~client service item file with a time stamp associated with the server service item file;~~

~~an update unit adapted to update the client service item file on the basis~~  
~~of the server service item file in accordance with a result of the comparison performed by said~~  
~~comparison unit; and~~

~~a client computer print process driver adapted to process a print job~~  
~~according to [[said]] a particular set of printing attributes.~~

Claim 2 (currently amended): A printing system according to claim 1, wherein said ~~external apparatus comprises a print application adapted to~~ server computer comprises a print application adapted to:

update the client service item file on the basis of ~~[[a]]~~ the server service item file which is associated with a plurality of printers, each printer supporting printing attributes of at least one of ~~[[said]]~~ the user selectable service items; and

print the processed print job on a specific printer supporting the particular set of printing attributes of the particular selected service item.

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Claim 3 (currently amended): A printing system ~~according to either as in any~~ one of claims 1 and 2, wherein said ~~communication is over a network~~ is one or more of a dedicated connection, a local area network, and a wide area network, ~~comprising one of:~~

~~a dedicated connection;~~

~~a local area network; and~~

~~a wide area network.~~

Claim 4 (currently amended): A printing system according to claim 1, wherein ~~[[said]]~~ a user interface of the client computer is conformed to ~~[[said]]~~ a selected service item having a particular set of printing attributes dependent upon ~~[[said]]~~ a user selection of a particular service item.

Claim 5 (canceled)

Claim 6 (currently amended): A printing system according to claim [[5]] 1,  
wherein ~~said update label is a~~ the time stamp indicative of indicates a time of updating the server  
service item file.

Claim 7 (canceled)

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Claim 8 (currently amended): A printing system according to claim 1, wherein  
the print process driver comprises:

a file data conversion ~~process adapted to convert~~ means for  
converting the print job using the particular set of printing attributes, thereby producing print file  
data matched to ~~[[the]]~~ a specific printer.

Claim 9 (canceled)

Claim 10 (currently amended): A printing system according to claim 8,  
wherein the ~~conversion process comprises conversion of the~~ print job, being in a first page  
description language, is converted to the print file data, being in a second page description  
language, by said file data conversion means.

Claim 11 (original): A printing system according to claim 10, wherein the first  
page description language is Windows® GDI® and the second page description language is  
Postscript®.

Claim 12 (currently amended): A printing system according to claim [[4]] 2, further comprising[[(:)] print job storage means for storing the processed print job on the client computer in anticipation of [[said]] printing by the print application.

02 Claim 13 (original): A printing system according to claim 1, wherein the printing attributes relate to at least one of physical attributes of a printer, and generic attributes of the printer.

Claim 14 (original): A printing system according to claim 1, wherein the printing attributes comprise at least one of:

- a service item name;
- an associated icon name;
- a page layout attribute;
- a single sided attribute;
- a two-sided attribute;
- a page size attribute;
- a print resolution attribute;
- a paper type attribute;
- an ink type attribute;
- a page orientation attribute;
- a color definition;
- a printed medium definition;
- a paper dimension; and

at least one of top, bottom, left and right margin attributes.

Claim 15 (currently amended): A printing system according to claim 1, wherein the particular selected service item is associated with an explanatory graphical icon.

Claim 16 (currently amended): A printing system according to claim [[5]] 2, wherein the client service item file updating is performed upon [[said]] communication being established between the print application, the server, and the print process driver.

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Claims 17-24 (canceled)

Claim 25 (currently amended): A method of printing a print job using a printing system comprising a client computer and a server computer, connected to a network and each having storage means respectively for storing a client service item file and a server service item file, each of which comprises a set of user selectable service items, each service item comprising a set of print attributes; said method comprising steps of:

storing, in a storage means in a client computer, a client service item file which comprises a set of user selectable service items, each service item comprising a set of printing attributes;

comparing a time stamp associated with the client service item file with a time stamp associated with the server service item file;

updating said client service item file on the basis of the server service item file in accordance ~~to communication with an external apparatus~~ with a result in said comparison step;

~~selecting, by a user by means of a client computer user interface a particular one of said service items having a particular set of printing attributes; and~~

~~processing, by a client computer print process driver a print job, using a print process driver,~~ according to ~~[[said]]~~ a particular set of printing attributes.

On Claim 26 (currently amended): A method according to claim 25, further comprising ~~further~~ the steps of:

~~updating the client service item file, by a print application in the external apparatus, on the server computer, the client service item file~~ on the basis of ~~[[a]]~~ the server service item file which is associated with a plurality of printers, each printer supporting printing attributes of at least one of ~~[[said]]~~ the user selectable service items; and

printing the processed print job on a specific printer supporting the particular set of printing attributes of ~~[[the]]~~ a particular selected service item.

Claim 27 (currently amended): A method ~~according to either as in any~~ one of claims 25 and 26, wherein ~~said communication is over a the network comprising one of: is one or more of a dedicated connection, a local area network, and a wide area network.~~

~~a dedicated connection;~~

~~a local area network; and~~

~~a wide area network.~~

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Claim 28 (currently amended): A method according to claim 25, comprising a further step of[[:]] conforming [[said]] a user interface of the client computer to [[said]] a selected service item having a particular set of printing attributes dependent upon [[said]] a user selection of a particular service item.

Claim 29 (canceled)

Claim 30 (currently amended): A method according to claim [[29]] 25, wherein ~~said update label is a~~ the time stamp ~~indicative of~~ indicates a time of updating the server service item file.

Claim 31 (canceled)

Claim 32 (currently amended): A method according to claim 25, wherein [[the]] said processing step ~~comprises sub-steps of~~ includes:

converting the print job using the particular set of printing attributes;

and

producing print file data matched to [[the]] a specific printer.

Claim 33 (canceled)

Claim 34 (currently amended): A method according to claim 32, wherein the converting step ~~comprises a step of: page description~~ includes converting the print job, being in a first page description language, to print file data, being in a second page description language.

Claim 35 (original): A method according to claim 34, wherein the first page description language is Windows® GDI® and the second page description language is Postscript®.

*on* Claim 36 (currently amended): A method according to claim ~~[[28]]~~ 26, further comprising, prior to ~~[[the]]~~ printing ~~[[step]]~~ the print job, a ~~further~~ step of ~~[[:]]~~ storing the processed print job on the client computer.

Claim 37 (currently amended): A method according to claim 25, comprising a further step of ~~[[:]]~~ associating the particular selected service item with an explanatory graphical icon.

Claim 38 (currently amended): A method according to claim ~~[[25]]~~ 26, further comprising a ~~[[further]]~~ step of ~~[[:]]~~ updating the client service item file dependent upon ~~[[said]]~~ communication being established between ~~[[a]]~~ the print application, ~~[[a]]~~ the server computer, and the print process driver.



Claim 39 (currently amended): A computer readable memory medium for storing a program for executing a method for controlling an apparatus which prints a print job[[,]] ; said program comprising:

~~code for a storing step for storing, in a storage means in a client computer, a client service item file which comprises a set of user selectable service items, each service item comprising a set of printing attributes;~~

code for comparing a time stamp associated with a client service item file stored on a client computer with a time stamp associated with a server service item file stored on a server computer, the client computer and the server computer being connected to a network, each service item file comprising a set of user selectable service items, and each service item comprising a set of printing attributes;

~~code for an updating step for updating [[said]] the client service item file on the basis of the server service item file in accordance to communication with an external apparatus a result of the comparison performed by said comparison code; and~~

~~code for a selecting step for selecting, by a user by means of a client computer user interface a particular one of said service items having a particular set of printing attributes; and~~

~~code for a processing step for processing, by a client computer print process driver a print job, using a print process driver, according to [[said]] a particular set of printing attributes.~~

Claim 40 (currently amended): A computer readable memory medium according to claim 39, said program further comprising:

code for ~~an updating step for updating the client service item file~~, by a print application ~~in the external apparatus~~ on the server computer, the client service item file on the basis of ~~[[a]]~~ the server service item file which is associated with a plurality of printers, each printer supporting printing attributes of at least one of ~~[[said]]~~ the user selectable service items; and

code for ~~a printing step for printing the processed print job on a specific printer supporting the particular set of printing attributes of~~ ~~[[the]]~~ a particular selected service item.

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Claim 41 (currently amended): A computer readable memory medium ~~according to either~~ as in any one of claims 39 and 40, wherein ~~said communication is over a~~ the network comprising one of: is one or more of a dedicated connection, a local area network, and a wide area network.

~~a dedicated connection;~~

~~a local area network; and~~

~~a wide area network.~~

Claim 42 (currently amended): A computer readable memory medium according to claim 39, said program further comprising~~[[:]]~~ code for ~~a conforming step for conforming~~ ~~[[said]]~~ a user interface of the client computer to ~~[[said]]~~ a selected service item having a particular set of printing attributes dependent upon ~~[[said]]~~ a user selection of the service item.

Claim 43 (canceled)

Claim 44 (currently amended): A computer readable memory medium according to claim [[43]] 39, wherein ~~said update label is a~~ the time stamp ~~indicative of~~ indicates a time of updating the server service item file.

Claim 45 (canceled)

on  
Claim 46 (currently amended): A computer readable memory medium according to claim 39, wherein [[the]] said processing code ~~for the processing step comprises~~ includes:

code for ~~a converting step for~~ converting the print job using the particular set of printing attributes; and

code for ~~a producing step for~~ producing print file data matched to [[the]] a specific printer.

Claim 47 (canceled)

Claim 48 (currently amended): A computer readable memory medium according to claim 46, wherein [[the]] said converting code ~~for the converting step comprises~~[[:]] code ~~for a page description converting step~~ for page description converting the print job, being in a first page description language, to print file data, being in a second page description language.

Claim 49 (original): A computer readable memory medium according to claim 48, wherein the first page description language is Windows® GDI® and the second page description language is Postscript®.

Claim 50 (currently amended): A computer readable memory medium according to claim [[42]] 40, further comprising, ~~prior to the code for the printing step~~: code for a ~~storing step~~ for storing the processed print job on the client computer prior to printing the print job.


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Claim 51 (currently amended): A computer readable memory medium according to claim 39, further comprising[[:]] code ~~for an associating step~~ for associating the particular service item with an explanatory graphical icon.

Claim 52 (currently amended): A computer readable memory medium according to claim [[39]] 40 further comprising[[:]] code for ~~an updating step~~ for updating the client service item file dependent upon [[said]] communication being established between [[a]] the print application, [[a]] the server computer, and the print process driver.

Claim 53 (new): A printing system according to claim 1, wherein said update unit performs said updating if the result of the comparison indicates that the time stamp associated with the client service item file is older than the time stamp associated with the server item file.

Claim 54 (new): A printing system adapted to control at least one of a plurality of printers to print a print job having a client computer and a server computer, connected to a network and respectively having storage means for storing a service item file which comprises a set of user selectable service items, each service item comprising a set of printing attributes; said printing system comprising:

icon storage in the client computer adapted to store a client icon file having icons which are associated with the user selectable service items in the client service item file;

 icon storage in the server computer adapted to store a server icon file having icons which are associated with the user selectable service items in the server service item file, wherein the server icon file is updated dependant upon a change to the plurality of printers;

a comparison unit adapted to compare a time stamp associated with the client icon file with a time stamp associated with the server icon file;

an update unit adapted to update the client icon file on the basis of the server icon file in accordance with a result of the comparison performed by said comparison unit; and

a print process driver adapted to process a print job according to a set of printing attributes.

Claim 55 (new): A printing system according to claim 54, wherein said update unit performs said updating if the result of the comparison indicates that the time stamp associated with the client icon file is older than the time stamp associated with the server icon file.

Claim 56 (new): A method for printing a print job on at least one of a plurality of printers using a printing system comprising a client computer and a server computer, connected to a network and respectively having storage means for storing a service item file which comprises a set of user selectable service items, each service item comprising a set of printing attributes; said method comprising the steps of:

storing, in an icon storage in the client computer, a client icon file having icons which are associated with the user selectable service items in the client service item file;

02 storing, in an icon storage in the server computer, a server icon file having icons which are associated with the user selectable service items in the server service item file, wherein the server icon file is updated dependant upon a change to a plurality of printers;

comparing a time stamp associated with the client icon file with a time stamp associated with the server icon file;

updating the client icon file on the basis of the server icon file in accordance with a result of the comparison in said comparison step; and

processing a print job, using a print process driver, according to the set of printing attributes.


Claim 57 (new): A computer readable memory medium storing a program executing a method for controlling a printing system printing a print job, the printing system comprising a client computer and a server computer, connected to a network and respectively having storage means for storing a service item file which comprises a set of user selectable service items, each service item comprising a set of printing attributes; said program comprising:

code for storing, in an icon storage in the client computer, a client icon file having icons which are associated with the user selectable service items in the client service item file;

code for storing, in an icon storage in the server computer, a server icon file having icons which are associated with the user selectable service items in the server service item file, wherein the server icon file is updated dependant upon a change to a plurality of printers;

code for comparing a time stamp associated with the client icon file with a time stamp associated with the server icon file;

code for updating the client icon file on the basis of the server icon file in accordance with a result of the comparison by said comparison code; and

 code for processing a print job, using a print process driver, according to the set of printing attributes.

Claim 58 (new): A printing system adapted to control at least one of a plurality of printers to print a print job, said system having a client computer and a server computer, connected to a network and respectively having storage means for storing a service item file which comprises a set of user selectable service items, each service item comprising a set of printing attributes; said printing system comprising:

a first update unit adapted to update a server service item file dependent upon a change to the plurality of printers;


an assignment unit adapted to assign an update label to the updated server service item file, wherein the update label is a version number; and

a second update unit adapted to update a client service item file dependent upon the version number of the server service item file.

Claim 59 (new): A method of printing a print job in a printing system controlling a plurality of printers, the system comprising a client computer and a server computer, connected to a network and respectively having storage means for storing a service item file which comprises a set of user selectable service items, each service item comprising a set of printing attributes; said method comprising the steps of:

updating a server service item file dependent upon a change to the plurality of printers;

assigning an update label to the updated server service item file,

 wherein the update label is a version number; and

updating a client service item file dependent upon the version number of the server service item file.

Claim 60 (new): A computer readable memory medium storing a program executing a method for controlling a plurality of printers in a printing system to print a print job, the printing system comprising a client computer and a server computer, connected to a network and respectively having storage means for storing a service item file which comprises a set of user selectable service items, each service item comprising a set of printing attributes; said program comprising:

code for updating a server service item file dependent upon a change to the plurality of printers;



code for assigning an update label to the updated server service item  
file, wherein the update label is a version number; and

code for updating a client service item file dependent upon the version

or

number of the server service item file.